

INCH-POUND

MIL-T-27/74A
13 March 1991
SUPERSEDING
MIL-T-27/74A
14 April 1976

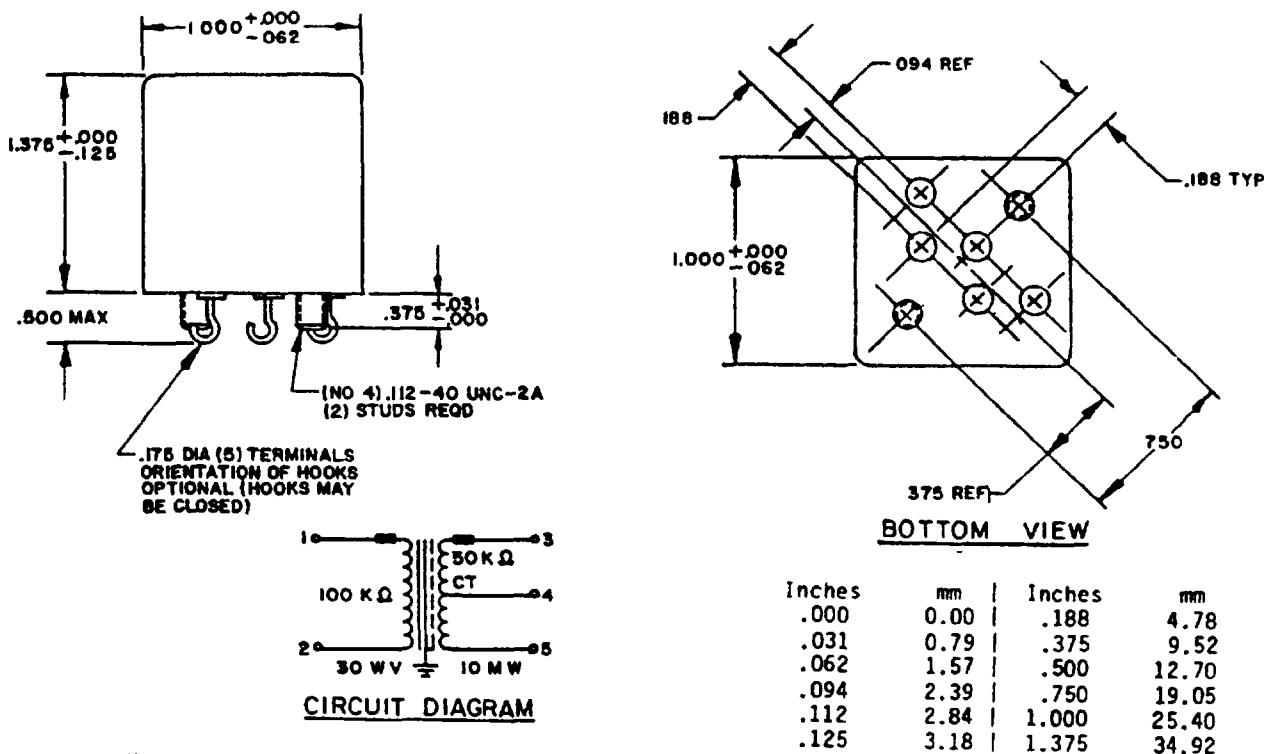
MILITARY SPECIFICATION SHEET

TRANSFORMER, AUDIO FREQUENCY, TF4R21AG891

(A) Inactive for new design after the date of this specification.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation. MIL-T-27.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.016 (0.41 mm).
4. Marking shall be on sides or top of case.

FIGURE 1 Dimensions and configurations.

(A) denotes changes

AMSC N/A

1 of 3

FSC 5950

DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited.

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REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the extreme terminals of the windings.)

Electrical ratings:

Primary power level: 10 mW maximum.

Working voltage: 30 volts.

Primary current: Zero.

Primary impedance (1-2): 100 kilohms.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Altitude: 10,000 feet.

Terminals: Wire hook.

Diameter: 0.175 inch.

Length: 0.500 inch maximum.

Weight: 0.2 pound.

Operating temperature range: -55°C to +105°C.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage (at sea level): 500 V rms.

Electrical characteristics:

No load (center tap voltage unbalance only): With 5 V, 1 kHz applied to (1-2); unbalance (3-4) and (4-5) 1 percent maximum.

Harmonic distortion: Total harmonic content of output: 5% with 5 V, 400 Hz applied to (1-2) maximum.

Primary impedance: 100 kilohms with approximately 5 V, 400 Hz applied to (1-2) and 50 kilohms across (3-5).

Frequency response:

$Z_S = 100$ kilohms (1-2).

$Z_L = 50$ kilohms (3-5).

$E_S = 5$ V.

Reference frequency = 1 kHz

Frequency range is 100 to 10,000 Hz ± 2 dB.

Insertion loss: 1 dB with 10 mW, 400 Hz across (1-2) maximum.

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Resonance: Second resonant frequency - 20 kHz minimum.

Electrostatic shielding: Voltage ratio, 5:1 minimum at 20 kHz.

Polarity: Additive, with terminals 2 and 3 connected.

① Quality assurance provisions:

Qualification inspection: Not applicable.

Quality conformance inspection: Groups A and B tests of MIL-T-27 shall be applicable.

Marking location: See figure 1.

Part number M27/74-01.

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Army - MI
Navy - OS, SH
Air Force - 17, 80
DLA - ES

User activities:
Army - AR, ME
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0753-29)